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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,929	07/21/2003	Brian R. Young	9060-206	6464
20792	7590	12/14/2005		
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			EXAMINER CAVALLARI, DANIEL J	
			ART UNIT 2836	PAPER NUMBER

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/623,929	<b>Applicant(s)</b> YOUNG, BRIAN R.	
	<b>Examiner</b> Daniel J. Cavallari	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/9/2004</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 12/9/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### **Abstract**

The abstract of the disclosure is objected to because it exceeds 150 words in length. The abstract was counted at 160 words therefore correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

Claim 1 recites the limitation of "a backlight circuit coupled to the UPS circuit and operative provide different backlightings.." This sentence is grammatically incorrect. A more proper sentence would be "a backlight circuit coupled to the UPS circuit and operative to provide different backlightings.."

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-9, 11, 15, 16, & 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US 5,854,617).

Lee et al. (*hereinafter referred to as Lee*) teaches:

In regard to Claims 1, 3, 4, 11, 15, 16, & 18

- A UPS circuit (20) operative to power a load, read on by a computer (10) from a first (24) and second (22) power source (See Figure 4 & Column 4, Line 62 to Column 5, Line 14)
- A LCD display (50) (See Figure 4 & Column 4, Line 62 to Column 5, Line 14)
- A backlight circuit (30) coupled to the UPS circuit and operative to provide difference backlightings of the display responsive to respective states of the UPS circuit (See Column 5, Lines 15-25) in which Lee teaches controlling luminescence levels (backlighting intensities) using the backlight drive circuit (30) (See Column 5, Lines 38-47)

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In regard to Claim 5, 9

- A housing that houses the UPS circuit, the display and the backlight read on by a portable computer (See Column 4, Lines 40-43)

In regard to Claims 6, 7, 8, 19, 20, 21, & 22

- The backlight circuit operative to provide a first backlighting of the display responsive to the UPS circuit powering the load from a primary power source and to provide a second backlighting of the display responsive to the UPS circuit powering the load from a backup power source (See Column 8, Lines 24-35)
- A third backlighting of the display responsive to the UPS circuit detecting an impending failure of the backup power source, read on by a low battery in which the luminescence level is set to 0, an alarm state as well as a first state (level 7) to a normal operating state of the UPS circuit, a second state (level 4) responsive to a cautionary state of the UPS (See Column 8, Lines 24-35 & Table 1)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 14, & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. and Suzuki (2001/0041605 A1).

Lee teaches:

- A backlight circuit (30) coupled to the UPS circuit and operative to provide difference backlightings of the display responsive to respective states of the UPS circuit (See Column 5, Lines 15-25)
- The backlight circuit operative to provide a first backlighting of the display responsive to the UPS circuit powering the load from a primary power source and to provide a second backlighting of the display responsive to the UPS circuit powering the load from a backup power source (See Column 8, Lines 24-35)
- A third backlighting of the display responsive to the UPS circuit detecting an impending failure of the backup power source, read on by a low battery in which the luminescence level is set to 0, an alarm state as well as a first state (level 7) to a normal operating state of the UPS circuit, a second state (level 4) responsive to a cautionary state of the UPS (See Column 8, Lines 24-35 & Table 1)

Lee fails to teach the backlight circuit operative to backlight the display with respective colors responsive to respective states of the UPS circuit.

Suzuki teaches changing the color of a backlight in accordance with detection of the respective state of the UPS (See Paragraph 59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the color backlight display taught by Suzuki into the UPS system taught by Lee using a multi color display as opposed to a single color display in which the color of the display is used to indicate the operating status of the respective operating states of the UPS device, as taught by Suzuki.

The motivation would have been to change the color of the display in order to reduce the amount of power consumed by choosing a color which consumes less power when the battery is low as well as to provide a user friendly visual display of the UPS batteries status (See Paragraph 59).

Claims 12 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. and Zhang et al. (US 2004/0207404 A1)

Incorporating all arguments above of the uninterruptible power supply backlight display taught by Lee in which the device is capable of detecting whether power is supplied from a battery or an external source (See step S530 of Figure 5). Lee fails to teach a first color responsive to the UPS circuit powering the load from a primary power source and to backlight the LCD with a second

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color responsive to the UPS circuit powering the load from a backup power source, the battery.

Zhang et al. teaches an uninterruptible power supply colored power supply status indicator which detects whether a main power source or backup power source is being used to power the device and displays the corresponding colors, unlit or solid yellow, to indicate the operating status of the UPS (See Paragraph 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee incorporating a color display indicating the power supply operating status of the UPS, as taught by Zhang et al., into the backlight of Lee. The motivation would have been to indicate to the user when a power failure has occurred.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sakai et al. (US 2002/0033692 A1) teaches an uninterruptible power supply incorporating a color display which indicates the state of the UPS power supply (See Paragraph 86)
- Fallon et al. (US 2003/0132949 A1) teaches a UPS battery state indicator which utilizes shading changes, color changes, flashing graphical and/or non-graphical indicators, in order to convey the UPS power supply operating status (See Paragraph 95)



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- Kimura (US 6,762,740) teaches an apparatus for lighting a display using different colors of a backlight. The colors of the backlight display vary corresponding to the battery level of the device (See Column 1, Line 49 to Column 2, Line 2)
- Lys et al. (US 6,717,376) teaches an LCD backlighting system that provides battery power information through a color changing LCD screen (See Column 29, Lines 17-49)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJC

December 7, 2005



BRIAN CIRCUS  
SUPERVISORY PATENT EXAMINER  
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